

## AMENDMENTS TO THE CLAIMS

### Listing of Claims:

1. **(Previously Presented)** A method for managing a marketing campaign, comprising:
  - providing a data mining engine capable of being trained with training data; and capable thereafter of performing inferences relative to the training data and on additional data;
  - providing a user database containing observed characteristics of each one of a set of users, the characteristics comprising at least one of: (a) at least one of the user's attributes, (b) at least one of the user's preferences;
  - training the data mining engine with a set of training data comprising the user database by clustering the user database into different segments of users distinguished by different states of one or more characteristics;
  - inputting to the data mining engine a predetermined set of characteristics including a predetermined set of user attributes likely to pertain to a product to which the marketing campaign is directed and, in response thereto, obtaining from the data mining engine a subset of the users in the database having the highest correlation to the characteristic by determining which of the segments found during clustering of the user database has the highest statistical correlation to the predetermined set of characteristics;
  - determining in the data mining engine a set of prevalent attributes of the subset of users;
  - defining a target database of users and determining in the data mining engine a target subset of users in the target database statistically correlated to the set of prevalent attributes;
  - conducting a marketing campaign cycle directed at the target subset of users;
  - observing responses of the target subset of users to the marketing campaign cycle;

forming a focused group of the target subset of users whose observed response was a particular type of response;  
determining, in the data mining engine, a group of prevalent characteristics of the focused group of users; and  
defining a database to be mined and determining, in the data mining engine, a new set of users in the database to be mined whose characteristics are statistically correlated with the group of prevalent characteristics.

**2. (Canceled)**

**3. (Canceled)**

**4. (Canceled)**

**5. (Canceled)**

**6. (Previously presented)** The method of Claim 1 wherein the target database comprises the user database with which the data mining engine has been trained.

**7. (Previously presented)** The method of Claim 1 wherein the target database comprises an additional database not included in the user database, the additional data base defining characteristics of a set of new users.

**8. (Canceled)**

**9. (Canceled)**

**10. (Previously presented)** The method of Claim 1 wherein the database to be mined comprises the user database with which the data mining engine was trained.

**11. (Previously presented)** The method of Claim 1 wherein the database to be mined comprises the target data base of users.

**12. (Previously presented)** The method of Claim 1 wherein the database to be mined comprises a new database not included in either the user data base nor in the target user database.

**13. (Previously presented)** The method of Claim 1 further comprising:  
directing a subsequent marketing campaign cycle to the new set of users.

**14 (Canceled).**

**15. (Previously presented)** The method of Claim 1 wherein the user preference corresponds to a prior purchase of a product which is a subject of the marketing campaign.

**16. (Original)** The method of Claim 1 further comprising:  
determining, in the data mining engine, a complete set of statistically prevalent user attributes of the subset of users;  
for any member of the subset of users having certain attributes which are undetermined in the user data base, filling in the certain undetermined attributes with the corresponding ones of the complete set of statistically prevalent user attributes of the subset of users.

**17. (Previously presented)** The method of Claim 1 further comprising:  
for any member of the target subset of users having certain attributes which are undetermined, filling in the certain undetermined attributes with the corresponding ones of the set of prevalent user attributes of the subset of users.

**18 Canceled**

**19. (Previously presented)** The method of Claim 1 wherein clustering comprises:

providing with a visualization tool a tabulation of characteristics of each cluster with the probability of each characteristic in the cluster,

labeling each cluster with a statistically predominant characteristic thereof in accordance with the tabulation.

20. **(Currently Amended)** The method of claim 19 wherein the statistically predominant characteristic of each cluster distinguishes ~~distinguishes~~ the cluster from the other clusters.

21. **(Previously presented)** A method of personalizing marketing resources, comprising:

providing a data mining engine capable of being trained with training data and capable thereafter of performing inferences relative to the training data;

providing a user database for correlating observed characteristics of each one of a set of users with a set of adaptable marketing features, the observed characteristics comprising: (a) at least one of the user's attributes, and (b) at least one of the user's preferences;

training the data mining engine with a set of training data comprising the user database by clustering the users in the database into user segments with similar observed characteristics;

inputting to the data mining engine a set of user attributes of one of: (a) a particular user, or (b) a particular group of users; and, in response thereto,

obtaining from the data mining engine a subset of the adaptable marketing features having the highest correlation to the set of user attributes by determining which of the user segments identified during the training of the data mining engine has characteristics that are statistically correlated with the set of user attributes; and wherein the subset of adaptable marketing features is determined based upon the preferences of users in the user segments statistically correlated to the set of user attributes.

22. **(Original)** The method of Claim 21 further comprising:

constructing a presentation to be directed to the particular user or group of users comprising marketing features contained within the subset of marketing features.

23. **(Currently Amended)** The method of Claim 21 wherein the subset of adaptable marketing features comprise a set of different advertisements.

24. **(Original)** The method of Claim 23 wherein the marketing features comprise a set of different products which can be marketed at a common site.

25. **(Original)** The method of Claim 21 wherein the marketing features comprise a set of different potential features of a storefront.

26. **(Original)** The method of Claim 21 wherein the marketing features comprise a set of different potential features of a catalog.

27. **(Original)** The method of Claim 21 wherein the marketing features comprise a set of different potential features of a shopping experience.

28. **(Original)** The method of Claim 21 wherein the marketing features comprise a set of different potential features of a direct mailing.

29. **(Original)** The method of Claim 21 wherein the marketing features comprise a set of different potential features of a promotion.

**Claim 30 (Canceled)**

31. **(Previously presented)** A method of controlling the marketing resources of an Internet site having a real-time user interface during a visit to the Internet site by a particular user, comprising:

providing a data mining engine capable of being trained with training data and capable thereafter of performing inferences relative to the training data;

providing a user database for correlating observed characteristics of each one of a set of users with a set of adaptable marketing features, the observed characteristics comprising at least one of: (a) user attributes, and (b) user preferences;

training the data mining engine with a set of training data comprising the user database by clustering the users in the database into segments of users with similar characteristics ;

inputting to the data mining engine a set of user attributes of the particular user by obtaining observed characteristics of the particular user through a real-time user interface of the Internet site; and, in response to characteristics observed through the interface , obtaining from the data mining engine a subset of the adaptable marketing features having the highest correlation to the set of user attributes by determining which of the segments has characteristics that are statistically correlated with the set of user attributes; and wherein

the subset of adaptable marketing features is determined based upon the preferences of the segments of users that was statistically correlated to the set of user attributes input to the data mining engine.

**32. (Original)** The method of Claim 31 further comprising:

constructing a presentation to be directed to the particular user comprising marketing features contained within the subset of marketing features.

**33. (Currently amended)** The method of Claim 31 wherein the subset of adaptable marketing features comprise a set of different advertisements.

**34. (Original)** The method of Claim 33 wherein the marketing features comprise a set of different products which can be marketed at a common site.

35. **(Original)** The method of Claim 31 wherein the marketing features comprise a set of different potential features of a storefront.

36. **(Original)** The method of Claim 31 wherein the marketing features comprise a set of different potential features of a catalog.

37. **(Original)** The method of Claim 31 wherein the marketing features comprise a set of different potential features of a shopping experience.

38. **(Original)** The method of Claim 31 wherein the marketing features comprise a set of  
different potential features of a direct mailing.

39. **(Original)** The method of Claim 31 wherein the marketing features comprise a set of different potential features of a promotion

40 **(Canceled)**

41 **(Canceled)**

42 **(Canceled)**

43 **(Canceled)**

44 **(Canceled)**

45. **(Previously presented)** The method of Claim 31 wherein some characteristics of the particular user are not observed through the interface, but have been previously determined by clustering for the segment to which the particular user is assigned, whereby the characteristics not observed through the interface are filled in upon assignment of the particular user to a segment.

46. **(Original)** The method of Claim 32 further comprising:  
observing through the interface responses of the user to the presentation.

47. **(Previously presented)** The method of Claim 46 further comprising:  
comparing a distribution of the observed responses across the marketing features of the presentation to corresponding distributions in different ones of the segments so as to detect any errors in the assignment of the particular user to a segment; and  
correcting the assignment of the user to a different segment in response to the detection of an error.

48. **(Original)** The method of Claim 47 further comprising: based upon the corrected assignment of the user to a new segment, obtaining from the data mining engine a subset of the adaptable marketing features having the highest correlation to the set of user attributes.

49. **(Original)** The method of Claim 48 further comprising modifying the presentation based upon the latest subset of marketing features obtained from the data mining engine,  
whereby to increase the likelihood of a favorable response by the user.

50. **(Original)** The method of Claim 49 further comprising adding the user and an  
identification of the user's assigned segment to the user data base.

51. **(Canceled)**

52. **(Canceled)**

53. **(Canceled)**

54. **(Canceled)**

55. **(Canceled)**

56. **(Canceled)**

57. **(Canceled)**



58. (Currently Amended) A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

providing a data mining engine capable of being trained with training data and capable thereafter of performing inferences relative to the training data; and on additional data;

providing a user database defining the observed characteristics of each one of a set of users, the characteristics comprising at least one of: (a) at least one of the user's attributes, (b) at least one of the user's preferences;

training the data mining engine with a set of training data comprising the user database by clustering the user data base into different segments of user ~~distinguished~~ distinguished by different states of a characteristic;

inputting to the data mining engine a predetermined set of characteristics including a predetermined set of user attributes likely to pertain to a product to which the marketing campaign is directed and, in response thereto, obtaining from the data mining engine a subset of the users in the data base having the highest correlation to the characteristic by determining which of the segments found during clustering of the user database has the highest statistical correlation to the predetermined characteristic;

determining in the data mining engine a set of prevalent attributes of the subset of users;

defining a target database of users and determining in the data mining engine a target subset of users in the target data base statistically correlated to the set of prevalent;

conducting a marketing campaign cycle directed at the target subset of users;

observing responses of the target subset of users to the marketing campaign cycle

forming a focused group of the target subset of users whose observed response was a particular type of response;

determining, in the data mining engine, a group of prevalent characteristics of the focused group of users; and

defining a database to be mined and determining, in the data mining engine, a new set of users in the database to be mined whose characteristics are statistically correlated with the group of prevalent characteristics.

59. **(Previously presented)** A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

providing a data mining engine capable of being trained with training data and capable thereafter of performing inferences relative to the training data;

providing a user database for correlating observed characteristics of each one of a set of users with a set of adaptable marketing features, the observed characteristics comprising at least one of: (a) at least one of the user's attributes, (b) at least one of the user's preferences;

training the data mining engine with a set of training data comprising the user data base by clustering the users in the database into user segments with similar characteristics;

inputting to the data mining engine a set of user attributes of one of: (a) a particular user, or (b) a particular group of users; and, in response thereto,

obtaining from the data mining engine a subset of the adaptable marketing features having the highest correlation to the set of user attributes by determining which of the user segments identified during the training of the data mining engine has characteristics that are statistically correlated with the set of user attributes;

and wherein the subset of marketing features is determined based upon the preferences of the segments statistically correlated to the set of user attributes.

60. **(Previously presented)** A machine-readable medium having instructions stored thereon for execution by a processor to perform a method of controlling the marketing resources of an Internet site comprising:

providing a data mining engine capable of being trained with training data and capable thereafter of performing inferences relative to the training data;

providing a user database correlating observed characteristics of each one of a set of users with a set of adaptable marketing features, the observed characteristics comprising at least one of: (a) user attributes, and (b) user preferences;

training the data mining engine with a set of training data comprising the user database by clustering the users in the database into segments of users with similar characteristics;

inputting to the data mining engine a set of user attributes of the particular user by obtaining observed characteristics of the particular user through a real time user interface of the Internet site and, in response to characteristics observed through the interface , obtaining from the data mining engine a subset of the adaptable marketing features having the highest correlation to the set of user attributes by determining which of the segments has characteristics that are statistically correlated with the set of user attributes; and wherein

the subset of marketing features is determined based upon the preferences of the segments statistically correlated to the set of user attributes.

**61 (Canceled)**

**62 (Canceled)**

**63 (Canceled)**

**64 (Canceled)**